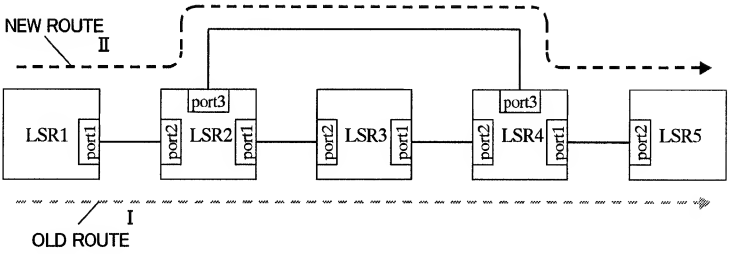
FIG. 1


NEW ROUTE
II
LSR1
port1
port2
port3
LSR2
port1
port2
LSR3
port1
port2
port3
LSR4
port1
port2
LSR5
I
OLD ROUTE

EP 0822 [illegible]

FIG. 2A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	LSPID	OUTPUT PORT	OUTPUT LABEL
INFORMATION OF LSR1 TO LSR5	1	1	L21
⋮	⋮	⋮	⋮

FIG. 2B

LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
1	L21	O	1	1	L31
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 2C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L31	O	1	1	L41
⋮	⋮	⋮	⋮	⋮	⋮

LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L41	O	1	1	L51
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 2D

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	NOTE
2	L51	O	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮

FIG. 2E

TOSZZT'ETZEEOOT

FIG. 3A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	LSPID	OUTPUT PORT	OUTPUT LABEL
INFORMATION OF LSR1 TO LSR5	1	1	L21
	1	1	–
⋮	⋮	⋮	⋮

FIG. 3B

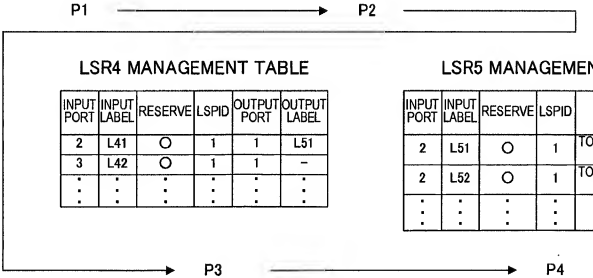
LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L21	○	1	1	L31
2	L22	○	1	3	–
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 3C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L31	○	1	1	L41
⋮	⋮	⋮	⋮	⋮	⋮



LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L41	○	1	1	L51
3	L42	○	1	1	–
⋮	⋮	⋮	⋮	⋮	⋮

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	NOTE
2	L51	○	1	TO UPPER LAYER AFTER DELETING LABEL
2	L52	○	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮

FIG. 3D

FIG. 3E

T0922T*EP2EE00T

FIG. 4A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	LSPID	OUTPUT PORT	OUTPUT LABEL
	1	1	L21
INFORMATION OF LSR1 TO LSR5	1	1	L22
⋮	⋮	⋮	⋮

FIG. 4B

LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L21	○	1	1	L31
2	L22	○	1	3	L42
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 4C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L31	○	1	1	L41
⋮	⋮	⋮	⋮	⋮	⋮

P8 ← P7 ←

LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L41	○	1	1	L51
3	L42	○	1	1	L52
⋮	⋮	⋮	⋮	⋮	⋮

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	NOTE
2	L51	○	1	TO UPPER LAYER AFTER DELETING LABEL
2	L52	○	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮

P6 ← P5

FIG. 4D

FIG. 4E

TOB22T*ET2EC00T

FIG. 5A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	LSPID	OUTPUT PORT	OUTPUT LABEL
	–	–	–
INFORMATION OF LSR1 TO LSR5	1	1	L22
⋮	⋮	⋮	⋮

FIG. 5B

LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L21	×	–	–	–
2	L22	○	1	3	L42
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 5C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L31	×	–	–	–
⋮	⋮	⋮	⋮	⋮	⋮

P9 → P10 → P11

LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L41	×	–	–	–
3	L42	○	1	1	L52
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 5D

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	NOTE
2	L51	×	–	–
2	L52	○	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮

P12 → P13

FIG. 5E

T0822T*EP2EE00T

FIG. 6A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	LSPID	OUTPUT PORT	OUTPUT LABEL
INFORMATION OF LSR1 TO LSR5	1	1	L21
	1	1	–
⋮	⋮	⋮	⋮

FIG. 6B

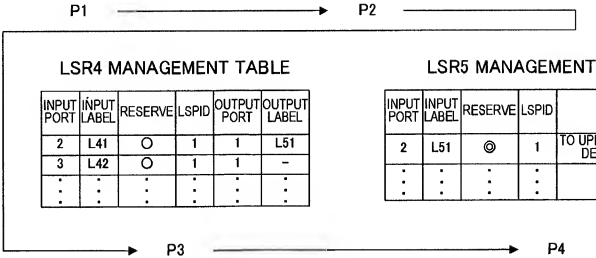
LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L21	◎	1	1	L31
				3	–
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 6C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L31	○	1	1	L41
⋮	⋮	⋮	⋮	⋮	⋮



LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L41	○	1	1	L51
3	L42	○	1	1	–
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 6D

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	NOTE
2	L51	◎	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮

FIG. 6E

T0822T*ET2EE00T

FIG. 7A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	LSPID	OUTPUT PORT	OUTPUT LABEL
	1	1	L21
INFORMATION OF LSR1 TO LSR5	1	1	L21
⋮	⋮	⋮	⋮

FIG. 7B

LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L21	◎	1	1	L31
				3	L42
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 7C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L31	○	1	1	L41
⋮	⋮	⋮	⋮	⋮	⋮

P8 ← P9 ←

LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L41	○	1	1	L51
3	L42	○	1	1	L51
⋮	⋮	⋮	⋮	⋮	⋮

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	NOTE
2	L51	◎	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮

P6 ← P5 ←

FIG. 7D

FIG. 7E

T09227'ST2EE00T

FIG. 8A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	LSPID	OUTPUT PORT	OUTPUT LABEL
	–	–	–
INFORMATION OF LSR1 TO LSR5	1	1	L21
⋮	⋮	⋮	⋮

FIG. 8B

LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L21	○	1	3	L42
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 8C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L31	×	–	–	–
⋮	⋮	⋮	⋮	⋮	⋮

P9 → P10 → P11 → P12

LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	OUTPUT PORT	OUTPUT LABEL
2	L41	○	–	–	–
3	L42	○	1	1	L51
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 8D

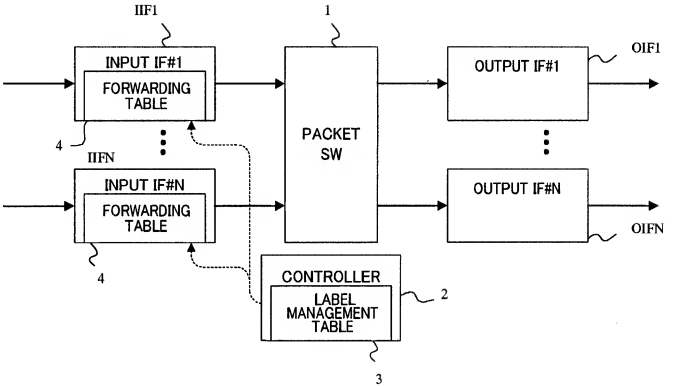
LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	LSPID	NOTE
2	L51	○	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮

P12 → P13

FIG. 8E

FIG. 9


IIF1
1
INPUT IF#1
FORWARDING TABLE
4
IIFN
INPUT IF#N
FORWARDING TABLE
4
PACKET SW
OUTPUT IF#1
OIF1
OUTPUT IF#N
OIFN
CONTROLLER
LABEL MANAGEMENT TABLE
2
3

T0822T*ST2EE00T

FIG. 10A

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
#1	5	○	2	#2	4
#1	7	×	–	–	–
#2	7	◎	1	#1	5
#2	7	◎	1	#3	4

FIG. 10B

INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
5	○	2	#2	4
4	×	–	–	–
7	◎	1	#1	5
7	◎	1	#3	4

FIG. 11A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
INFORMATION OF LSR1 TO LSR5	1	1	L21
⋮	⋮	⋮	⋮

FIG. 11B

LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
2	L21	O	1	1	L31
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 11C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
2	L31	O	1	1	L41
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 11D

LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
2	L41	O	1	1	L51
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 11E

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	NOTE
2	L51	O	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮

T0822T' ET2EE00T

FIG. 12A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
INFORMATION OF LSR1 TO LSR5	1	1	L21
	1	1	–
⋮	⋮	⋮	⋮

FIG. 12B

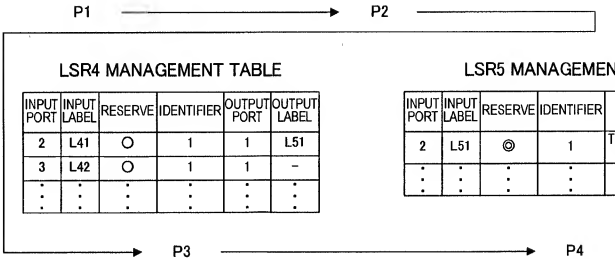
LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
2	L21	○	1	1	L31
				3	–
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 12C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
2	L31	○	1	1	L41
⋮	⋮	⋮	⋮	⋮	⋮



LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
2	L41	○	1	1	L51
3	L42	○	1	1	–
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 12D

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	NOTE
2	L51	◎	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮

FIG. 12E

T0822T*EP2566001

FIG. 13A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
	1	1	L21
INFORMATION OF LSR1 TO LSR5	1	1	L21
⋮	⋮	⋮	⋮

FIG. 13B

LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
2	L21	◎	1	1	L31
				3	L42
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 13C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
2	L31	○	1	1	L41
⋮	⋮	⋮	⋮	⋮	⋮

P8 ← P7 ←

LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
2	L41	○	1	1	L51
3	L42	○	1	1	L51
⋮	⋮	⋮	⋮	⋮	⋮

P6 ←

FIG. 13D

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	NOTE
2	L51	◎	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮

P5

FIG. 13E

TOSHIBA ETRSC001

FIG. 14A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
	–	–	–
INFORMATION OF LSR1 TO LSR5	1	1	L21
⋮	⋮	⋮	⋮

FIG. 14B

LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
2	L21	○	1	3	L42
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 14C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
2	L31	×	–	–	–
⋮	⋮	⋮	⋮	⋮	⋮

P9 → P10 → P11

LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
2	L41	×	–	–	–
3	L42	○	1	1	L51
⋮	⋮	⋮	⋮	⋮	⋮

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENTIFIER	NOTE
2	L51	○	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮

P12 → P13

FIG. 14D

FIG. 14E

FIG. 15A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	IDENTIFIER	OUTPUT PORT	OUTPUT LABEL
INFORMATION OF LSR1 TO LSR5	1	1	L21
⋮	⋮	⋮	⋮

FIG. 15B

LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENTI -FIER	OUTPUT PORT	OUTPUT LABEL
2	L21	○	低	1	1	L31
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 15C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENTI -FIER	OUTPUT PORT	OUTPUT LABEL
2	L31	○	低	1	1	L41
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 15D

LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENTI -FIER	OUTPUT PORT	OUTPUT LABEL
2	L41	○	低	1	1	L51
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 15E

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENTI -FIER	NOTE
2	L51	○	低	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮	⋮

FOB22F*E725E00F

FIG. 16A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	IDENTI -FIER	OUTPUT PORT	OUTPUT LABEL
INFORMATION OF LSR1 TO LSR5	1	1	L21
	1	1	–
⋮	⋮	⋮	⋮

FIG. 16B

LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENT -IFIER	OUTPUT PORT	OUTPUT LABEL
2	L21	◎	LOW	1	1	L31
			–		3	–
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 16C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENT -IFIER	OUTPUT PORT	OUTPUT LABEL
2	L31	○	LOW	1	1	L41
⋮	⋮	⋮	⋮	⋮	⋮	⋮

P1 → P2

LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENT -IFIER	OUTPUT PORT	OUTPUT LABEL
2	L41	○	LOW	1	1	L51
3	L42	○	–	1	1	–
⋮	⋮	⋮	⋮	⋮	⋮	⋮

P3 → P4

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENT -IFIER	NOTE
2	L51	◎	–	1	TO UPPER LAYER AFTER DELETING LABEL
			LOW		
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 16D

FIG. 16E

FIG. 17A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	IDENT-IFIER	OUTPUT PORT	OUTPUT LABEL
	1	1	L21
INFORMATION OF LSR1 TO LSR5	1	1	L21
⋮	⋮	⋮	⋮

FIG. 17B

LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT LABEL
2	L21	◎	HIGH	1	1	L31
			LOW		1	L42
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 17C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENT IFIER	OUTPUT PORT	OUTPUT LABEL
2	L31	○	LOW	1	1	L41
⋮	⋮	⋮	⋮	⋮	⋮	⋮

P8 ← P7 ←

LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT LABEL
2	L41	○	HIGH	1	1	L51
3	L42	○	LOW	1	1	L51
⋮	⋮	⋮	⋮	⋮	⋮	⋮

P6 ← P5 ←

FIG. 17D

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	IDENT-IFIER	RELEAF PRIORITY	NOTE
2	L51	◎	1	HIGH	TO UPPER LAYER AFTER DELETING LABEL
				LOW	
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 17E

FIG. 18A

LSR1 MANAGEMENT TABLE

INPUT INFORMATION	IDENT-IFIER	OUTPUT PORT	OUTPUT LABEL
	–	–	–
INFORMATION OF LSR1 TO LSR5	1	1	L21
⋮	⋮	⋮	⋮

FIG. 18B

LSR2 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT LABEL
2	L21	○	LOW	1	3	L42
⋮	⋮	⋮	–	–	–	–
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 18C

LSR3 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT LABEL
2	L31	×	–	–	–	–
⋮	⋮	⋮	⋮	⋮	⋮	⋮

P9 → P10 → P11

LSR4 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT LABEL
2	L41	×	–	–	–	–
3	L42	○	LOW	1	1	L51
⋮	⋮	⋮	⋮	⋮	⋮	⋮

LSR5 MANAGEMENT TABLE

INPUT PORT	INPUT LABEL	RESERVE	RELEAF PRIORITY	IDENT-IFIER	NOTE
2	L51	○	LOW –	1	TO UPPER LAYER AFTER DELETING LABEL
⋮	⋮	⋮	⋮	⋮	⋮

P12 → P13

FIG. 18D

FIG. 18E

FIG. 19

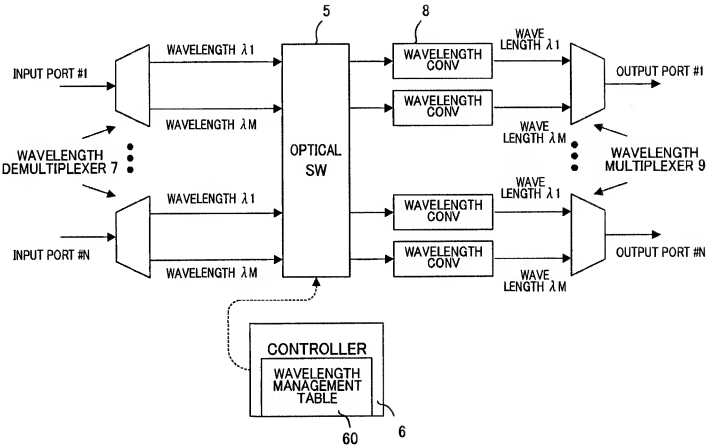

5
8
INPUT PORT #1
WAVELENGTH λ1
WAVELENGTH λM
WAVELENGTH CONV
WAVELENGTH CONV
WAVE LENGTH λ1
WAVE LENGTH λM
OUTPUT PORT #1
WAVELENGTH DEMULTIPLEXER 7
OPTICAL SW
WAVELENGTH MULTIPLEXER 9
INPUT PORT #N
WAVELENGTH λ1
WAVELENGTH λM
WAVELENGTH CONV
WAVELENGTH CONV
WAVE LENGTH λ1
WAVE LENGTH λM
OUTPUT PORT #N
CONTROLLER
WAVELENGTH MANAGEMENT TABLE
60
6

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FIG. 20

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENTI -FIER	OUTPUT PORT	OUTPUT WAVE LENGTH
#1	λ5	○	2	#2	λ4
#1	λ7	×	-	-	-
#2	λ7	◎	1	#1	λ5
#2	λ7	◎	1	#3	λ4

FIG. 21

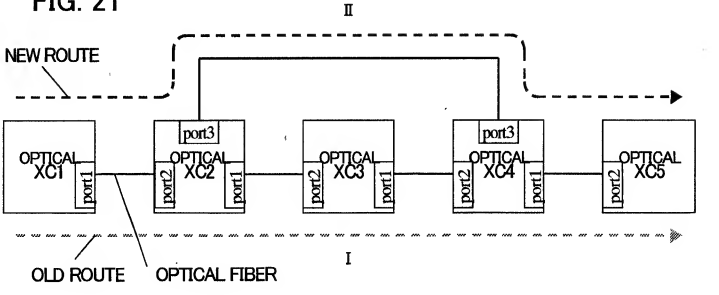


FIG. 22A

OPTICAL XC1 MANAGEMENT TABLE

INPUT INFORMATION	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
INFORMATION OF OPTICAL XC1 TO OPTICAL XC5	1	1	λ21
⋮	⋮	⋮	⋮

FIG. 22B

OPTICAL XC2 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ21	○	1	1	λ31
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 22C

OPTICAL XC3 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ31	○	1	1	λ41
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 22D

OPTICAL XC4 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ41	○	1	1	λ51
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 22E

OPTICALXC5 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	NOTE
2	λ51	○	1	TO UPPER LAYER
⋮	⋮	⋮	⋮	⋮

FIG. 23A

OPTICAL XC1 MANAGEMENT TABLE

INPUT INFORMATION	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
INFORMATION OF OPTICAL XC1 TO OPTICAL XC5	1	1	λ21
	1	1	–
⋮	⋮	⋮	⋮

FIG. 23B

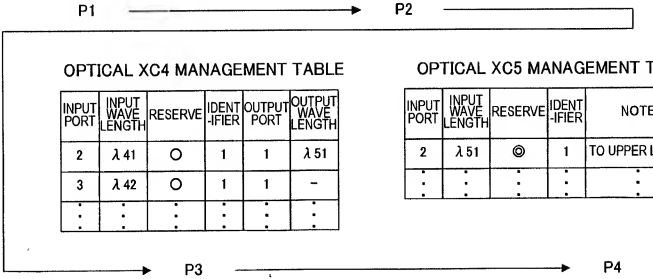
OPTICAL XC2 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ21	◎	1	1	λ31
				3	–
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 23C

OPTICAL XC3 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ31	○	1	1	λ41
⋮	⋮	⋮	⋮	⋮	⋮



OPTICAL XC4 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ41	○	1	1	λ51
3	λ42	○	1	1	–
⋮	⋮	⋮	⋮	⋮	⋮

OPTICAL XC5 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	NOTE
2	λ51	◎	1	TO UPPER LAYER
⋮	⋮	⋮	⋮	⋮

FIG. 23D

FIG. 23E

T09227 ET2CC00T

FIG. 24A

OPTICAL XC1 MANAGEMENT TABLE

INPUT INFORMATION	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
	1	1	λ21
INFORMATION OF OPTICAL XC1 TO OPTICAL XC5	1	1	λ21
⋮	⋮	⋮	⋮

FIG. 24B

OPTICAL XC2 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ21	◎	1	1	λ31
				1	λ42
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 24C

OPTICAL XC3 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ31	○	1	1	λ41
⋮	⋮	⋮	⋮	⋮	⋮

P8 ← P7 ←

OPTICAL XC4 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ41	○	1	1	λ51
3	λ42	○	1	1	λ51
⋮	⋮	⋮	⋮	⋮	⋮

P6 ←

FIG. 24D

OPTICAL XC5 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	NOTE
2	λ51	◎	1	TO UPPER LAYER
⋮	⋮	⋮	⋮	⋮

P5 ←

FIG. 24E

TOB22T*ST2EE00T

FIG. 25A

OPTICAL XC1 MANAGEMENT TABLE

INPUT INFORMATION	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
	–	–	–
INFORMATION OF OPTICAL XC1 TO OPTICAL XC5	1	1	λ21
⋮	⋮	⋮	⋮

FIG. 25B

OPTICAL XC2 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ21	○	1	3	λ42
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 25C

OPTICAL XC3 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ31	×	–	–	–
⋮	⋮	⋮	⋮	⋮	⋮

P9 → P10 → P11

OPTICAL XC4 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ41	×	–	–	–
3	λ42	○	1	1	λ51
⋮	⋮	⋮	⋮	⋮	⋮

P12 → P13

FIG. 25D

OPTICAL XC5 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	NOTE
2	λ51	○	1	TO UPPER LAYER
⋮	⋮	⋮	⋮	⋮

FIG. 25E

FIG. 26A

OPTICAL XC1 MANAGEMENT TABLE

INPUT INFORMATION	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
INFORMATION OF OPTICAL XC1 TO OPTICAL XC5	1	1	λ21
⋮	⋮	⋮	⋮

FIG. 26B

OPTICAL XC2 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ21	○	LOW	1	1	λ31
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 26C

OPTICAL XC3 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ31	○	LOW	1	1	λ41
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 26D

OPTICAL XC4 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ41	○	LOW	1	1	λ51
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 26E

OPTICAL XC5 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	NOTE
2	λ51	○	LOW	1	TO UPPER LAYER
⋮	⋮	⋮	⋮	⋮	⋮

FIG. 27A

OPTICAL XC1 MANAGEMENT TABLE

INPUT INFORMATION	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
INFORMATION OF OPTICAL XC1 TO OPTICAL XC5	1	1	λ21
	1	1	–
⋮	⋮	⋮	⋮

FIG. 27B

OPTICAL XC2 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ21	◎	LOW	1	1	λ31
			–		1	–
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 27C

OPTICAL XC3 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ31	○	LOW	1	1	λ41
⋮	⋮	⋮	⋮	⋮	⋮	⋮

P1 → P2

OPTICAL XC4 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ41	○	LOW	1	1	λ51
3	λ42	○	–	1	1	–
⋮	⋮	⋮	⋮	⋮	⋮	⋮

P3 →

FIG. 27D

OPTICAL XC5 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	NOTE
2	λ51	◎	–	1	TO UPPER LAYER
			LOW		
⋮	⋮	⋮	⋮	⋮	⋮

→ P4

FIG. 27E

FIG. 28A

OPTICAL XC1 MANAGEMENT TABLE

INPUT INFORMATION	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
	1	1	λ21
INFORMATION OF OPTICAL XC1 TO OPTICAL XC5	1	1	λ21
⋮	⋮	⋮	⋮

FIG. 28B

OPTICAL XC2 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ21	◎	HIGH	1	1	λ31
			LOW		1	λ42
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 28C

OPTICAL XC3 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ31	○	LOW	1	1	λ41
⋮	⋮	⋮	⋮	⋮	⋮	⋮

P8 ← P7 ←

OPTICAL XC4 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ41	○	HIGH	1	1	λ51
3	λ42	○	LOW	1	1	λ51
⋮	⋮	⋮	⋮	⋮	⋮	⋮

P6 ←

FIG. 28D

OPTICAL XC5 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	IDENT-IFIER	RELEAF PRIORITY	NOTE
2	λ51	◎	1	HIGH	TO UPPER LAYER
				LOW	
⋮	⋮	⋮	⋮	⋮	⋮

← P5

FIG. 28E

FIG. 29A

OPTICAL XC1 MANAGEMENT TABLE

INPUT INFORMATION	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
	–	–	–
INFORMATION OF OPTICAL XC1 TO OPTICAL XC5	1	1	λ21
⋮	⋮	⋮	⋮

FIG. 29B

OPTICAL XC2 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ21	○	LOW	1	3	λ42
⋮	⋮	⋮	–	–	–	–
⋮	⋮	⋮	⋮	⋮	⋮	⋮

FIG. 29C

OPTICAL XC3 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ31	×	–	–	–	–
⋮	⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮	⋮

P9 → P10 → P11

OPTICAL XC4 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	OUTPUT PORT	OUTPUT WAVE LENGTH
2	λ41	×	–	–	–	–
3	λ42	○	LOW	1	1	λ51
⋮	⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮	⋮

OPTICAL XC5 MANAGEMENT TABLE

INPUT PORT	INPUT WAVE LENGTH	RESERVE	RELEAF PRIORITY	IDENT-IFIER	NOTE
2	λ51	○	LOW –	1	TO UPPER LAYER
⋮	⋮	⋮	⋮	⋮	⋮
⋮	⋮	⋮	⋮	⋮	⋮

P12 → P13

FIG. 29D

FIG. 29E